This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

What Is Claimed Is:

1. A liquid crystal display device, comprising:

a substrate;

a thin film transistor disposed on the substrate, the thin film transistor including a gate electrode, a source electrode and a drain electrode;

a gate line arranged in a first direction on the substrate, the gate line connected with the gate electrode of the thin film transistor;

a gate insulation layer disposed on the substrate and covering the gate line and the gate electrode of the thin film transistor;

an intrinsic semiconductor layer disposed on the gate insulation layer;
an extrinsic semiconductor layer disposed on the intrinsic semiconductor
layer;

a data line arranged in a second direction substantially perpendicular to the first direction disposed on the extrinsic semiconductor layer, the data line connected to the source electrode of the thin film transistor;

first and second dummy metal layers formed over the gate line and arranged on opposite sides of the data line;

18

a passivation layer covering the data line, the source electrode, the drain electrode and the first and second dummy metal layers; and

a pixel electrode located at a pixel region defined by an intersection of the gate line and the data line, the pixel electrode contacting the drain electrode of the thin film transistor.

- 2. The liquid crystal display device according to Claim 1, wherein the first and second dummy metal layers are formed of a same material as the data line.
- 3. The liquid crystal display device according to Claim 1, wherein the first and second dummy metal layers are electrically isolated from the data line.
- 4. The liquid crystal display device according to Claim 1, wherein the pixel electrode is formed of at least one of indium-tin-oxide (ITO) and indium-zinc-oxide (IZO).
- 5. The liquid crystal display device according to Claim 1, further comprising a storage capacitor that includes a capacitor electrode, a portion of the gate line and a portion of the pixel electrode.
- 6. The liquid crystal display device according to Claim 5, wherein the portion of the pixel electrode contacts the capacitor electrode.

19

- 7. The liquid crystal display device according to Claim 1, wherein the intrinsic semiconductor layer extends along the gate insulation layer to cover the gate line at the intersection of the gate line and the data line.
- 8. The liquid crystal display device according to Claim 1, wherein the passivation has a first width disposed along the first and second directions and a second width covering the intersection of the gate line and the data line.
- 9. The liquid crystal display device according to Claim 8, wherein the second width is greater than the first width.
- 10. The liquid crystal display device according to Claim 1, wherein the passivation layer contacts the intrinsic semiconductor layer between at least one of the first and second dummy metal layers and the intersection of the gate line and the data line.
- 11. A method of fabricating a liquid crystal display device, comprising the steps of:

forming a first metal layer on a substrate;
forming a gate line and a gate electrode from the first metal layer;

forming a gate insulation layer, a pure amorphous silicon layer, a doped amorphous silicon layer and a second metal layer to cover the patterned first metal layer;

forming a data line, a source electrode, a drain electrode, a first dummy metal layer, a second dummy metal layer and a capacitor electrode from the second metal layer, the first and second dummy metal layers arranged on opposite sides of the data line and over the gate line;

forming an insulator to cover the patterned second metal layer;

forming a passivation layer and a pure amorphous silicon layer to cover the data line, the source electrode, the drain electrode, the first dummy metal layer, the second dummy metal layer and the capacitor electrode, and

forming a pixel electrode located at a pixel region defined by an intersection of the gate line and the data line, the pixel electrode contacting the drain electrode and the capacitor electrode.

12. The method of fabricating a liquid crystal display device according to Claim 11, wherein the gate electrode extends from the gate line, the source electrode extends from the data line, and the drain electrode is spaced apart from the source electrode.

- 13. The method of fabricating a liquid crystal display device according to Claim 11, wherein the gate line is arranged in a first direction on the substrate and the data line is arranged in a second direction perpendicular to the first direction.
- 14. The method of fabricating a liquid crystal display device according to Claim 11, wherein the first and second dummy metal layers are electrically isolated from the data line and positioned adjacent the intersection of the gate line and the data line.
- 15. The method of fabricating a liquid crystal display device according to Claim 11, wherein the pure amorphous silicon layer extends along the gate insulating layer to cover the gate line at the intersection of the gate line and the data line.
- 16. The method of fabricating a liquid crystal display device according to Claim 11, wherein the passivation has a first width disposed along the first and second directions and a second width covering the intersection of the gate line and the data line.
- 17. The method of fabricating a liquid crystal display device according to Claim 16, wherein the second width is greater than the first width.

22

18. The method of fabricating a liquid crystal display device according to
Claim 11, wherein the passivation layer contacts the pure amorphous silicon layer
between at least one of the first and second dummy metal layers and the
intersection of the gate line and the data line.

19. A liquid crystal display device, comprising:

a substrate;

a gate line disposed on the substrate along a first direction, the gate line connected with a gate electrode of a thin film transistor;

a data line disposed on the substrate along a second direction substantially perpendicular to the first direction, the data line connected to a source electrode of the thin film transistor; and

first and second dummy metal layers disposed over the gate line and on opposite sides of the data line.

20. The liquid crystal display device according to Claim 19, further comprising a storage capacitor that includes a capacitor electrode, a portion of the gate line and a portion of a pixel electrode, the pixel electrode disposed at a pixel region defined by an intersection of the gate line and the data line, the pixel electrode contacting a drain electrode of the thin film transistor.

23